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09/265,070	03/09/1999	YOICHI YAMAGISHI	1232-4519	4078

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EXAMINER
WU, DOROTHY

ART UNIT	PAPER NUMBER
2697	10

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/265,070	Applicant(s) YAMAGISHI ET AL.
	Examiner Dorothy Wu	Art Unit 2697

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 March 1999* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-68* is/are pending in the application.

4a) Of the above claim(s) *1-16,38 and 60* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6,7* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group 2 in Paper No. 9 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 17-34, 45-48, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 17, 21, 26, 31, and 45, the phrase "and/or" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are claimed in the alternative or inclusive. All dependent claims are subsequently rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 17-20, 26-27, 29-34, 40-41, 43-48, 54-55, 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama et al, U.S. Patent 6,389,179, as disclosed in the Information Disclosure Statement, in view of well-known prior art

As best understood from the language of the claim, regarding claim 17, Katayama et al teaches an image processing apparatus (col. 1, lines 7-8) having a function of storing a plurality of sensed still images in a storage means (col. 1, lines 11-12, and col. 9, lines 21-24), comprising: image sensing means (image sensing unit **110**) comprising an image sensing lens **101** which can change an optical system condition (col. 9, lines 53-54, and col. 11, lines 14-17); storage means (image memory **130**) for storing a plurality of images sensed by said image sensing means (image sensing unit **110**) in association with each other (col. 9, lines 21-24, 25-29, and col. 1, lines 11-12); optical system condition change instruction means (in-focus detector **142**) for outputting an instruction for changing the optical system condition of said image sensing lens (col. 11, lines 54-58, 67-col. 12, lines 1-11), and control means (signal processing unit **190**) for controlling to inhibit the optical system condition of said image sensing lens from changing when the release button is depressed to its first stroke position (col. 12, lines 24-43). Katayama et al further teaches that when the release button is then depressed to its second control position, image data is sensed and stored to memory (col. 12, line 44-col. 13, line 4). Katayama et al does not teach that the control means inhibits the optical system condition from changing after a first one of the plurality of images to be stored in said storage means in association with each other is sensed and stored. The examiner takes official notice that it is well known in the art to use the same image sensing conditions when sensing images that are to be associated with one another in a panoramic mode. It would have been obvious to one of ordinary

skill in the art at the time the invention was made to alter the apparatus taught by Katayama et al so that the prohibition of the optical system condition from changing occurs after the first one of the plurality of images has been sensed and stored for ensuring that the images to be associated with one another have uniform image characteristics.

As best understood from the language of the claim, regarding claim 18, Katayama et al teaches that the optical system condition is a focal length of said image sensing lens (col. 11, line 54-col. 12, lines 8, 19-26).

As best understood from the language of the claim, regarding claim 19, Katayama et al teaches that the association of the plurality of images is obtaining of a panoramic image by synthesizing the plurality of images (col. 1, lines 10-12).

As best understood from the language of the claim, regarding claim 20, Katayama et al teaches that the plurality of images are images sensed by performing pixel shift, and associating the plurality of images is obtaining a high-resolution image by synthesizing the plurality of images sensed by performing the pixel shift (Figs. 6 and 15; col. 10, lines 34-48; col. 19, line 10-col. 21, line 3).

As best understood from the language of the claim, regarding claim 26, Katayama et al teaches an image processing apparatus (col. 1, lines 7-8) having a function of storing a plurality of sensed still images in a storage means (col. 1, lines 11-12, and col. 9, lines 21-24), comprising: image sensing means (image sensing unit **110**) comprising an image sensing lens **101** which can change an optical system condition (col. 9, lines 53-54, and col. 11, lines 14-17); storage means (image memory **130**) for storing a plurality of images sensed by said image sensing means (image sensing unit **110**) in association with each other (col. 9, lines 21-24, 25-29,

and col. 1, lines 11-12); optical system condition change instruction means (in-focus detector **142**) for outputting an instruction for changing the optical system condition of said image sensing lens (col. 11, lines 54-58, 67-col. 12, lines 1-11), and control means (signal processing unit **190**) for controlling to set the optical system condition of said image sensing lens at an initial value before sensing of a first one of the plurality of images to be stored in said storage means in association with each other is started (col. 11, lines 54-58, 67-col. 12, lines 8, 19-23).

As best understood from the language of the claim, regarding claim 27, Katayama et al teaches that the optical system condition is a focal length of said image sensing lens (col. 11, line 54-col. 12, lines 8, 19-26).

As best understood from the language of the claim, regarding claim 29, Katayama et al teaches that the association of the plurality of images is obtaining of a panoramic image by synthesizing the plurality of images (col. 1, lines 10-12).

As best understood from the language of the claim, regarding claim 30, Katayama et al teaches that the plurality of images are images sensed by performing pixel shift, and associating the plurality of images is obtaining a high-resolution image by synthesizing the plurality of images sensed by performing the pixel shift (Figs. 6 and 15; col. 10, lines 34-48; col. 19, line 10-col. 21, line 3).

As best understood from the language of the claim, regarding claim 31, Katayama et al teaches a control method for an image processing apparatus (col. 1, lines 7-8) comprising: image sensing means (image sensing unit **110**) comprising an image sensing lens **101** which can change an optical system condition (col. 9, lines 53-54, and col. 11, lines 14-17); storage means (image memory **130**) for storing a plurality of images sensed by said image sensing means (image

sensing unit **110**) in association with each other (col. 9, lines 21-24, 25-29, and col. 1, lines 11-12); optical system condition change instruction means (in-focus detector **142**) for outputting an instruction for changing the optical system condition of said image sensing lens (col. 11, lines 54-58, 67-col. 12, lines 1-11), wherein the control method comprises the step of inhibiting the optical system condition of said image sensing lens from changing when the release button is depressed to its first stroke position (col. 12, lines 24-43). Katayama et al further teaches that when the release button is then depressed to its second control position, image data is sensed and stored to memory (col. 12, line 44-col. 13, line 4). Although Katayama et al does not teach the generation of the inhibit signal after a first one of the plurality of images to be stored in said storage means in association with each other is sensed and stored, it would have been obvious to one of ordinary skill to do so. See reasoning for claim 17.

As best understood from the language of the claim, regarding claim 32, Katayama et al teaches that the optical system condition is a focal length of said image sensing lens (col. 11, line 54-col. 12, lines 8, 19-26).

As best understood from the language of the claim, regarding claim 33, Katayama et al teaches that the association of the plurality of images is obtaining of a panoramic image by synthesizing the plurality of images (col. 1, lines 10-12).

As best understood from the language of the claim, regarding claim 34, Katayama et al teaches that the plurality of images are images sensed by performing pixel shift, and associating the plurality of images is obtaining a high-resolution image by synthesizing the plurality of images sensed by performing the pixel shift (Figs. 6 and 15; col. 10, lines 34-48; col. 19, line 10-col. 21, line 3).

Regarding claim 40, Katayama et al teaches an image processing apparatus (col. 1, lines 7-8) comprising: image sensing means (image sensing unit **110**) comprising an image sensing lens **101** which can change an optical system condition (col. 9, lines 53-54, and col. 11, lines 14-17); storage means (image memory **130**) for storing a plurality of images sensed by said image sensing means (image sensing unit **110**) in association with each other (col. 9, lines 21-24, 25-29, and col. 1, lines 11-12); optical system condition change instruction means (in-focus detector **142**) for outputting an instruction for changing the optical system condition of said image sensing lens (col. 11, lines 54-58, 67-col. 12, lines 1-11), wherein the control method comprises the step of setting the optical system condition of said image sensing lens at an initial value before sensing of a first one of the plurality of images to be stored in said storage means in association with each other is started (col. 11, lines 54-58, 67-col. 12, lines 8, 19-23).

Regarding claim 41, Katayama et al teaches that the optical system condition is a focal length of said image sensing lens (col. 11, line 54-col. 12, lines 8, 19-26).

Regarding claim 43, Katayama et al teaches that the association of the plurality of images is obtaining of a panoramic image by synthesizing the plurality of images (col. 1, lines 10-12).

Regarding claim 44, Katayama et al teaches that the plurality of images are images sensed by performing pixel shift, and associating the plurality of images is obtaining a high-resolution image by synthesizing the plurality of images sensed by performing the pixel shift (Figs. 6 and 15; col. 10, lines 34-48; col. 19, line 10-col. 21, line 3).

As best understood from the language of the claim, regarding claim 45, Katayama et al teaches an electronic camera system 100 comprising a computer that operates in accordance with pre-set programs (col. 9, lines 19-21). The storage medium that stores the coded programs for

executing control over the camera and its processes is inherently taught. Katayama et al teaches a control method for an image processing apparatus (col. 1, lines 7-8) comprising: image sensing means (image sensing unit **110**) comprising an image sensing lens **101** which can change an optical system condition (col. 9, lines 53-54, and col. 11, lines 14-17); storage means (image memory **130**) for storing a plurality of images sensed by said image sensing means (image sensing unit **110**) in association with each other (col. 9, lines 21-24, 25-29, and col. 1, lines 11-12); and optical system condition change instruction means (in-focus detector **142**) for outputting an instruction for changing the optical system condition of said image sensing lens (col. 11, lines 54-58, 67-col. 12, lines 1-11), wherein the control method includes the step of inhibiting the optical system condition of said image sensing lens from changing when the release button is depressed to its first stroke position (col. 12, lines 24-43). Katayama et al teaches the generation of a signal inhibiting the optical system condition from changing after a first one of the plurality of images to be stored in said storage means in association with each other is sensed and stored. See reasoning for claim 1.

As best understood from the language of the claim, regarding claim 46, Katayama et al teaches that the optical system condition is a focal length of said image sensing lens (col. 11, line 54-col. 12, lines 8, 19-26).

As best understood from the language of the claim, regarding claim 47, Katayama et al teaches that the association of the plurality of images is obtaining of a panoramic image by synthesizing the plurality of images (col. 1, lines 10-12).

As best understood from the language of the claim, regarding claim 48, Katayama et al teaches that the plurality of images are images sensed by performing pixel shift, and associating

the plurality of images is obtaining a high-resolution image by synthesizing the plurality of images sensed by performing the pixel shift (Figs. 6 and 15; col. 10, lines 34-48; col. 19, line 10-col. 21, line 3).

Regarding claim 54, Katayama et al teaches an electronic camera system 100 comprising a computer that operates in accordance with pre-set programs (col. 9, lines 19-21). The storage medium that stores the coded programs for executing control over the camera and its processes is inherently taught. Katayama et al teaches a control method for an image processing apparatus (col. 1, lines 7-8) comprising: image sensing means (image sensing unit **110**) comprising an image sensing lens **101** which can change an optical system condition (col. 9, lines 53-54, and col. 11, lines 14-17); storage means (image memory **130**) for storing a plurality of images sensed by said image sensing means (image sensing unit **110**) in association with each other (col. 9, lines 21-24, 25-29, and col. 1, lines 11-12); and optical system condition change instruction means (in-focus detector **142**) for outputting an instruction for changing the optical system condition of said image sensing lens (col. 11, lines 54-58, 67-col. 12, lines 1-11), wherein the control method includes the step of setting the optical system condition of said image sensing lens at an initial value before sensing of a first one of the plurality of images to be stored in said storage means in association with each other is started (col. 11, lines 54-58, 67-col. 12, lines 8, 19-23).

Regarding claim 55, Katayama et al teaches that the optical system condition is a focal length of said image sensing lens (col. 11, line 54-col. 12, lines 8, 19-26).

Regarding claim 57, Katayama et al teaches that the association of the plurality of images is obtaining of a panoramic image by synthesizing the plurality of images (col. 1, lines 10-12).

Regarding claim 58, Katayama et al teaches that the plurality of images are images sensed by performing pixel shift, and associating the plurality of images is obtaining a high-resolution image by synthesizing the plurality of images sensed by performing the pixel shift (Figs. 6 and 15; col. 10, lines 34-48; col. 19, line 10-col. 21, line 3).

4. Claims 21-25, 35-39, 49-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama et al, U.S. Patent 6,389,179, in view of well-known prior art, and further in view of Okauchi et al, U.S. Patent 5,864,360.

As best understood from the language of the claim, regarding claim 21, Katayama et al teaches an image processing apparatus (col. 1, lines 7-8) having a function of storing a plurality of sensed still images in a storage means (col. 1, lines 11-12, and col. 9, lines 21-24), comprising: image sensing means (image sensing unit **110**) comprising an image sensing lens **101** which can change an optical system condition (col. 9, lines 53-54, and col. 11, lines 14-17); storage means (image memory **130**) for storing a plurality of images sensed by said image sensing means (image sensing unit **110**) in association with each other (col. 9, lines 21-24, 25-29, and col. 1, lines 11-12); and optical system condition change instruction means (in-focus detector **142**) for outputting an instruction for changing the optical system condition of said image sensing lens (col. 11, lines 54-58, 67-col. 12, lines 1-11). Katayama et al teaches that the in-focus state of the lens is achieved prior to image sensing (col. 11, lines 54-58, 67-col. 12, lines 1-11; col. 12, lines 24-43). Katayama et al in view of well-known prior art do not teach control means for controlling to start image sensing of a plurality of new images to be stored in association with each other upon reception of the instruction for changing the optical system condition of said

image sensing lens from said optical system condition change instruction means after a first one of the plurality of images to be stored in said storage means in association with each other is sensed and stored. Okauchi et al teaches that the focusing point evaluation value is continually monitored such that when an object changes, a hill-climbing focusing operation restarts (col. 15, line 57-col. 18, line 25; col. 23, lines 47-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of setting the correct in-focus position prior to image sensing taught by Katayama et al in view of well-known prior art with the practice of continually monitoring the in-focus state of the subject and restarting the focusing when the object has moved taught by Okauchi et al to make an apparatus that restarts imaging to sense a plurality of new images when the focal length of the system needs to be changed to achieve an in-focus state. One of ordinary skill would have been motivated to make such a modification to ensure that all images the in plurality of associated images shall be in focus.

As best understood from the language of the claim, regarding claim 22, Katayama et al teaches that the optical system condition is a focal length of said image sensing lens (col. 11, line 54-col. 12, lines 8, 19-26).

As best understood from the language of the claim, regarding claim 23, Katayama et al teaches that the association of the plurality of images is obtaining of a panoramic image by synthesizing the plurality of images (col. 1, lines 10-12).

As best understood from the language of the claim, regarding claim 24, Katayama et al teaches that the plurality of images are images sensed by performing pixel shift, and associating the plurality of images is obtaining a high-resolution image by synthesizing the plurality of

images sensed by performing the pixel shift (Figs. 6 and 15; col. 10, lines 34-48; col. 19, line 10-col. 21, line 3).

As best understood from the language of the claim, regarding claim 25, Katayama et al teaches that the in-focus state of the lens is achieved prior to image sensing (col. 11, lines 54-58, 67-col. 12, lines 1-11; col. 12, lines 24-43). Katayama et al in view of well-known prior art do not teach that a plurality of new images are sensed when an alert signal is generated. Okauchi et al teaches that the focusing point evaluation value is continually monitored such that when an object changes, a hill-climbing focusing operation restarts (col. 15, line 57-col. 18, line 25; col. 23, lines 47-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the practice of determining an in-focus state of a lens prior to image sensing taught by Katayama et al with the practice of continually monitoring an object and restarting focusing taught by Okauchi et al to make apparatus that restarts imaging for a plurality of new images to be stored in association with each other after the camera has been alerted that the object is out of focus. One of ordinary skill would have been motivated to make such a modification to ensure that all images the in plurality of associated images shall be in focus.

Regarding claim 35, Katayama et al teaches a control method for an image processing apparatus (col. 1, lines 7-8) comprising: image sensing means (image sensing unit **110**) comprising an image sensing lens **101** which can change an optical system condition (col. 9, lines 53-54, and col. 11, lines 14-17); storage means (image memory **130**) for storing a plurality of images sensed by said image sensing means (image sensing unit **110**) in association with each other (col. 9, lines 21-24, 25-29, and col. 1, lines 11-12); and optical system condition change

instruction means (in-focus detector **142**) for outputting an instruction for changing the optical system condition of said image sensing lens (col. 11, lines 54-58, 67-col. 12, lines 1-11). Katayama et al in view of Okauchi et al teach the step of starting image sensing of a plurality of new images to be stored in association with each other upon reception of the instruction for changing the optical system condition of said image sensing lens from said optical system condition change instruction means after a first one of the plurality of images to be stored in said storage means in association with each other is sensed and stored. See reasoning for claim 21.

Regarding claim 36, Katayama et al teaches that the optical system condition is a focal length of said image sensing lens (col. 11, line 54-col. 12, lines 8, 19-26).

Regarding claim 37, Katayama et al teaches that the association of the plurality of images is obtaining of a panoramic image by synthesizing the plurality of images (col. 1, lines 10-12).

Regarding claim 38, Katayama et al teaches that the plurality of images are images sensed by performing pixel shift, and associating the plurality of images is obtaining a high-resolution image by synthesizing the plurality of images sensed by performing the pixel shift (Figs. 6 and 15; col. 10, lines 34-48; col. 19, line 10-col. 21, line 3).

Regarding claim 39, Katayama et al in view of Okauchi et al teach that image sensing of a plurality of new images to be stored in association with each other is started after the alert is generated. See reasoning for claim 25.

Regarding claim 49, Katayama et al teaches an electronic camera system 100 comprising a computer that operates in accordance with pre-set programs (col. 9, lines 19-21). The storage medium that stores the coded programs for executing control over the camera and its processes is inherently taught. Katayama et al further teaches a control method for an image processing

apparatus (col. 1, lines 7-8) comprising: image sensing means (image sensing unit **110**) comprising an image sensing lens **101** which can change an optical system condition (col. 9, lines 53-54, and col. 11, lines 14-17); storage means (image memory **130**) for storing a plurality of images sensed by said image sensing means (image sensing unit **110**) in association with each other (col. 9, lines 21-24, 25-29, and col. 1, lines 11-12); and optical system condition change instruction means (in-focus detector **142**) for outputting an instruction for changing the optical system condition of said image sensing lens (col. 11, lines 54-58, 67-col. 12, lines 1-11). Katayama et al in view of Okauchi et al teach the step of starting image sensing of a plurality of new images to be stored in association with each other upon reception of the instruction for changing the optical system condition of said image sensing lens from said optical system condition change instruction means after a first one of the plurality of images to be stored in said storage means in association with each other is sensed and stored. See reasoning for claim 21.

Regarding claim 50, Katayama et al teaches that the optical system condition is a focal length of said image sensing lens (col. 11, line 54-col. 12, lines 8, 19-26).

Regarding claim 51, Katayama et al teaches that the association of the plurality of images is obtaining of a panoramic image by synthesizing the plurality of images (col. 1, lines 10-12).

Regarding claim 52, Katayama et al teaches that the plurality of images are images sensed by performing pixel shift, and associating the plurality of images is obtaining a high-resolution image by synthesizing the plurality of images sensed by performing the pixel shift (Figs. 6 and 15; col. 10, lines 34-48; col. 19, line 10-col. 21, line 3).

Regarding claim 53, Katayama et al Okauchi et al teach the step of starting image sensing of a plurality of new images to be stored in association with each other after the alert is

generated. See reasoning for claim 21. Katayama et al teaches an electronic camera system 100 comprising a computer that operates in accordance with pre-set programs (col. 9, lines 19-21). The code corresponding to the control method is inherently taught.

5. Claims 28, 42 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama et al, U.S. Patent 6,389,179, in view of well-known prior art, and further in view of Miyamoto, J.P. Patent 10312001A.

As best understood from the language of the claims, regarding claims 28, 42, and 56, Katayama et al in view of well-known prior art teach the apparatus according to the limitations of claim 26. See above. Katayama et al in view of well-known prior art do not teach that the initial value is a focal length on a wide-angle end of said image sensing lens. Miyamoto teaches that when the panoramic photographing is chosen, the photographing lenses are driven to an initial wide-angle (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to set the initial focal length of an image sensing lens to the wide-angle end. One of ordinary skill would have been motivated to make such a modification to allow the panoramic image sensing process to cover as large a scene as possible.

6. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama et al, U.S. Patent 6,389,179, in view of well-known prior art, and further in view of Arai et al, U.S. Patent 5,600,371, disclosed in the Information Disclosure Statement.

Katayama et al in view of well-known prior art teaches the apparatus according to the limitations of claim 17. See above. Katayama et al in view of well-known prior art do not teach

that the change in the optical system condition is the attachment/detachment of the optical system. Arai et al teaches that when the lens is detached from the camera, the driving means of the lens is stopped, thereby prevented from outputting a signal to change the optical system condition (col. 11, lines 56-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate an alert when the image sensing lens has been detached from the lens. One of ordinary skill would have been motivated to make such a modification to cut off power from the system when image sensing can no longer be performed properly to conserve power.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dorothy Wu whose telephone number is 703-305-8412. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 703-305-4863.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231

Or faxed to:

703-872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.

Dorothy Wu

DW
May 5, 2003

K A Williams

Kimberly A. Williams
Primary Examiner
Technology Center 2600